Amendment

Response to Office Action mailed May 2, 2006

REMARKS/ARGUMENTS

Claims 1-23 are pending in this application. Claims 8-23 have been canceled without prejudice or disclaimer for being directed to a non-elected invention. No claim amendments have been made.

Claim Rejections under 35 U.S.C. §103

Claims 1-5 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Murakami et al., U.S. Patent No. 5,471,427 (Murakami) in view of Harper, U.S. Patent No. 3,633,175. Claim 6 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Murakami and Harper in view of Kato, U.S. Patent No. 6,249,850; and claim 7 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Murakami and Harper in view of Cloud, U.S. Patent No. 6,119,251. Applicants request reconsideration of the rejection for the following reasons.

Murakami discloses a circuit structure for repairing a defective bit in a semiconductor memory device. According to the reference, a fuse connected to a bit line can be cut so that the defective column can be cut away from the column decoder. Further, the address of the column including a defective bit is stored in the programming circuit 61 (*see*, col. 2, line 65- col. 3, line 8). The programming of the address in the programming circuit is generally carried out by the cutting of the fuse, and a large number of fuses are included in the programming circuit. However, Murakami is silent with respect to disclosing how many fuses are needed for storing the address and how they are programmed.

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The fuses (f1 ~fn) described in Fig. 1 of Murakami do not store any address as pointed out by the Examiner, and as is clear since they are placed after the column decoder. Since Murakami does not disclose the number of storage elements for storing a plurality of defect addresses, one having ordinary skill in the art would not arrive at the claimed invention by modifying Murakami as proposed in the rejection of claims 1-5. There is only one spare column in Fig. 1 and therefore, the reference is limited to disclosing that only one address can be repaired. Accordingly, the teachings of Murakami do not form an adequate foundation upon which the teachings of the secondary references of Harper, Kato and Cloud can be added in order to arrive at the claimed invention of claims 1-7. Accordingly, the rejections should be withdrawn and the claims allowed.

Conclusion

In view of the foregoing, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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JRM/so

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